QUARTERLY
THE ALLERGY AND ENVIRONMENTAL HEALTH ASSOCIATION

INSIDE...

- A Survival Guide for Hospitalization
- Keeping Renovation Costs Down
- Sick Building Syndrome
- Illness from Carpet Fumes
- Toxins Linked to Waste Burning
- Environmental Schools

Summer 1993 The AEHA Quarterly, Vol. XV, No. 2

EDITORS' MESSAGE

As editors of the AEHA Quarterly, we provide you with a variety of information on health matters. Much of this information comes in the form of warnings and notices of health hazards. We would like to take this a step further by providing you with useful, action-oriented solutions. It is important to know what the problem is. However, we also want to offer concrete solutions and alternatives. For example, this issue will provide you with a cross-Canada list of used building material stores and the pros and cons of going the "used material" route. You will also find a profile of one of our members and how she helped her family through Chemical Sensitivities, a detailed survival guide for hospital stays, a list of carpet information and testing resources, a free information source for wood preservatives, a listing of safe cotton suppliers and more.

If anyone has interesting (or better yet, useful) solutions they have found, or success stories, please let us know.

In the meantime, we hope the information and solutions we provide are making some of your lives a little easier.

Betty Auslander
Marianne Bertrand

PRESIDENT'S MESSAGE

I would like to thank Russ Otter for his service to our board and I would like to welcome Greg Booth as our Nova Scotia board member. We need suggestions for potential board members with experience in areas such as law, fund raising and public relations. We also need experienced committee members.

Appointing a new president was deferred to the next board meeting due to the departure of Russ Otter who was our Vice President and in order to allow new board members to be involved.

One of the major roadblocks we face is the discrimination we encounter when our problems are belittled by uninformed and opinionated individuals. This problem also affects physicians specializing in environmental medicine. The medical system is still self-regulated by peer committees which can and do exercise the power of privilege without regard for the greater need for responsibility. The medical profession is one of the last self-regulating bodies. Many, such as the police, have had this privilege reduced due to repeated abuse.

The AEHA is supporting initiatives designed to address the need for medical ethics and responsibility and to move the emphasis away from drugs and surgery toward health care.

One of our objectives is to write a primary position paper and a series of issues papers on topics such as medicine and health care. If you would like to contribute your thoughts on these matters please write to me directly. I am particularly interested in referenced papers on these subjects.

Yours sincerely,

Ed Lowans
Acting President

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ENVIRONMENTAL SENSITIVITIES

A growing segment of the population experience a variety of adverse reactions to environmental agents at levels well below those that might be deemed to affect average persons. This atypical reactivity is called Environmental Sensitivity.

Subsections of Environmental Sensitivity include labels descriptive of the site of the reaction such as "Asthma" (lungs) or of the mechanism of the reaction such as "Allergy", or of the causative agents such as "Multiple Chemical Sensitivity" or "Electromagnetic Sensitivity".

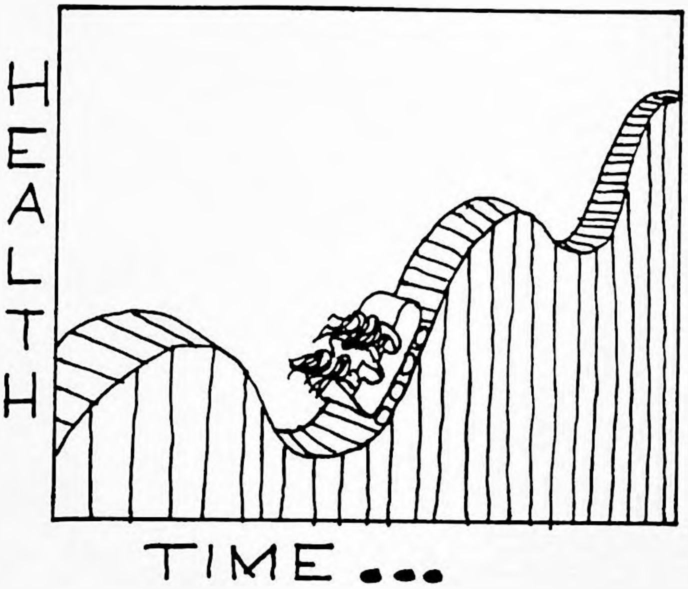
Typical agents include food, water, airborne substances, electromagnetic fields, and materials typically encountered in our daily lives, including both physiological and psychological stressors.

Sensitivity is highly individualistic, affecting each individual in a unique way, making definition, diagnosis and treatment difficult. Severe sensitivity is called "Hypersensitivity" and in some extreme instances, where a person has a sudden attack called "Anaphylaxis", the condition can be fatal. Symptoms may be mild and merely annoying, or they can be severe enough to interfere with daily activities, family life and career.
Environmental sensitivity is a degenerative illness. Prevention, early detection and treatment are therefore of paramount importance in dealing with this illness. Treatment of Environmental Sensitivity focuses on prevention, prudent avoidance of offending agents, appropriate nutrition, counselling and medical intervention.

Environmental Sensitivity is a relatively new field and as such is subject to considerable variation in interpretation. Environmental Sensitivities have been officially acknowledged as legitimate and compensatable disorders by many governments, agencies and research establishments.

MEMBER PROFILE

MAGGIE JOSHI:
AN ALLY FOR HER CHILDREN



Maggie Joshi teaches children with multiple handicaps. She is also a loving wife and mother of four children. Since she and all four children (including one that is adopted) have allergies, she has had to spend much of her married life finding and visiting supportive doctors; designing and preparing a suitable diet; investigating possible causes; and working with teachers, principals, caretakers, school boards and trustees to eliminate possible pollutants in schoolrooms so that her children did not end up sick at home.

Maggie had and has a solution-oriented approach. Her goal is to find diets and schoolroom situations in which her children would flourish rather than get sick. As she is fond of saying, "the proof of the pudding is in the eating."

When she realized that conventional medicine practitioners were not able to provide much help, she went to many alternative practitioners such as homeopaths, naturopaths and clinical ecologists. In order to pay for this, she continued to work.

In 1977, her oldest child was born. At 18 months and again at three years of age, doctors put tubes into her ears because of health problems. In 1981, she started junior kindergarten in the Riverdale area of Toronto and her asthma attacks began. Almost every five weeks, a doctor was prescribing another set of antibiotics. She had her tonsils removed. All during 1984, she took allergy shots but her health did not improve.

Reflecting on all of this, Maggie suspected that the more medical intervention her daughter had, the worse she became. She decided that she would only use antibiotics as a last resort. Since 1987, her family has used homeopathic remedies instead.

By July of 1987, Maggie's oldest daughter was very ill and yellow in colour. Maggie took her to an Environmental Medical Specialist who said she was full of candida. He recommended the very restricted diet outlined in Dr. Crook's Yeast Connection. Maggie was very firm about the diet changes for her daughter. She also put the rest of the family on a modified candida diet. She stopped using milk, chocolate, apple juice, cookies and ordinary bread. She used very little sugar and tried unusual grains, like amaranth. She encouraged everyone to drink more water. Her eldest daughter was able to gain five pounds the first month after her diet was changed. Her health greatly improved over the summer holidays.

When school started again in September, her health greatly deteriorated. The school air and the use of toxic chemicals in the school were suspected as causes. Once the problem was pinpointed, the Toronto Board of Education offered to put a Tibbit's clean air machine into her daughter's classroom. The carpet on the classroom floor was replaced with washable floor. The use of toxic cleaning chemicals in her classroom was minimized.

The result was that for the next two years, her daughter did not experience any more problems. She became more active, joined Girl Guides and took ballet lessons.

In the summer of 1988, Maggie and her husband purchased a cottage. She and the children have spent every summer there since. At the cottage,

everyone feels better and they can even cheat occasionally on their diets without getting sick.

In 1989, Maggie's daughter went to a new junior high school. By November, she was getting failing grades. She couldn't remember things like where her homework was. Maggie started talking to the principal and head caretaker about possible causes. She examined all the cleaning materials and decided that the problem might be the oil applied to mops. After some negotiation, she was able to get the caretaker to stop using the oiled mop in her daughter's section of the school.

At home, Maggie bought an electric stove to replace the gas stove they had been using. In March, she took her daughter to a general practitioner who used an interro machine to create drops. From February through June, Maggie saw her daughter flourish - "like seeing a flower bloom".

After returning to school in September, 1990, her daughter got very sick. Upon investigation, Maggie found that the mopping oil was being used again. Her daughter's recovery was made more difficult when the school was painted during the winter. Maggie took her to a series of doctors at this point because her general practitioner had stopped practising homeopathy. None of these doctors seemed to be able to help.

At this time, the Board of Education asked Maggie to join a committee which included caretakers to research and test safer cleaning chemicals. Material Safety Data Sheets (MSDS) were used as part of the research. She believes that they were able to identify safer cleaning agents, or ones that her children did not seem to react to. She notes that it is very important that when a school switches to the safer cleaners, all the old cleaners be removed. This removes a temptation to use up the old ones and prevents the "gassing off" of stored toxic chemicals into the school air.

In January, 1991, Maggie made an agreement with her daughter. Maggie would continue to pay all the medical costs as long as her daughter felt the treatments were helping her. Her daughter began to play a major role in the management of her own health care.
Maggie's daughter was in a high school where the many pool and cleaning chemicals seemed to be affecting her. She transferred to a smaller school nearer home where there was no pool. She was still sick and away from school often. At this point, they requested home instruction.

By this time, the family was seeing a naturopath who seemed to be helping her. She would visit the naturopath every six weeks and get a new batch of homeopathic remedies. However, her daughter did not experience big gains in her health and they suspected this was because of the poor air quality in her classroom.

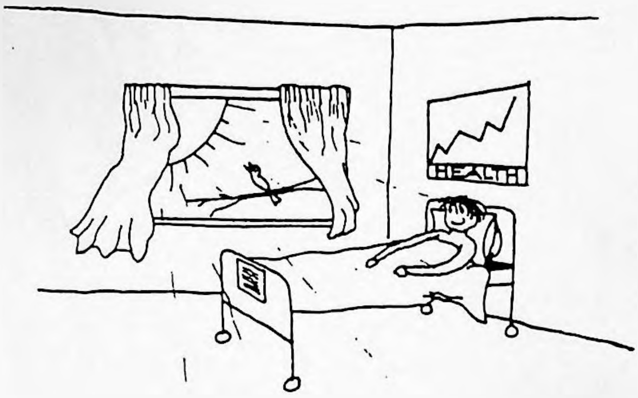
In November, 1991, Maggie bought a new furnace - a high efficiency sealed combustion gas unit that minimizes the amount of combustion by-products entering the home. This seemed to help.

In the fall of 1992, there was a change of caretakers at the daughter's high school and the school started to use safer cleaning chemicals. The gains were dramatic! Maggie's daughter is doing much better. She is rarely sick.

Maggie is still energetic and positive. She continues to work with people from the three schools her children attend. At present, all four of her children appear to be flourishing.

Betty Auslander

MEDICAL UPDATE



GUIDELINES FOR HOSPITALIZATION

If you are environmentally sensitive and find that you must be hospitalized, you will find these guidelines helpful. You can review these guidelines with the specialist that you are working with and ask him or her to attach them to your hospital chart.

(It should be noted that many of these guidelines are at the patient's discretion. Which ones are requested of the hospital or doctor will depend on the patient's knowledge and condition. For example, stricter guidelines may need to be implemented for children who cannot make decisions for themselves on these matters.)

As at home, it is important to avoid any adverse environmental exposures, to continue with your rotary diversified diet, tolerated clean water and current therapeutic program. This will markedly reduce the stress related to the hospital stay, including surgery.

Notes to your Caregivers

1. It will be necessary for the patient to have all of the therapeutic materials at their bedside if they are self-administered.

2. It is important to rely on the patient's information regarding medications which they tolerate and to avoid any medications to which they are clinically sensitive.

3. Private accommodation is necessary in order to comprehensively control the patient's environment. This is a medical necessity and should not be charged to the patient.

Hospital Staff

The cooperation of the staff is solicited in serving the best interests of the patient by following these suggestions:

a) New uniforms and shoes should not be worn for the first time while attending the patient.

b) While the patient is in hospital, all attending staff and ward personnel who attend the patient must avoid the use of all scented cosmetics, such as hair sprays, perfumes, colognes, after shave, shampoos, soaps and deodorants.

c) Clothing with residues of tobacco smoke, scented cosmetics, fabric softeners should not be worn. Clothing which is laundered with a 1/4 to a 1/2 cup of baking soda in the last rinse water is usually acceptable.

d) The staff should not be offended if a patient requests that they do not enter the room because of trace residual odours on their clothes which will adversely affect the patient but not the staff member. These patients have a very acute sense of smell.

The Patient's Room

a) The room should not be located in the vicinity of the O.R. or Chronic Care Unit, and should not be freshly painted or redecorated.

b) The private room should be located at the end of a windward wing of the hospital ward, well removed from the parking lot, truck delivery area, incinerator, or laundry room and other exhaust vents of the hospital.

c) Arrangements should be made with the maintenance department that no pesticide or herbicide, or other spraying, will occur indoors or outdoors during this patient's stay in hospital.

d) The patient should be permitted to provide his or her own air cleaner, charcoal mask and ceramic mask, for oxygen, as well as oxygen tubing. Any mechanical equipment, e.g.

radio, air cleaners, etc., will require safety check by the hospital engineering personnel.

e) The room should be free of carpeting, and it may be necessary to remove drapes and draw curtains in order to avoid residual odours from the previous occupant.

f) At the patient's discretion, flowers of any kind, natural or synthetic, should not be allowed in the room.

g) Smoking will not be allowed in the room by the patient, visitors, or hospital personnel. Anyone who has strong residual tobacco smoke odours in their clothing will not be permitted to enter the room. The door to the room should be kept closed at all times, and the instruction to personnel, stated above, should be fastened to the outside of the room door.

h) The patient will provide their own reading material. All freshly printed reading material must be excluded from the room.

i) The patient will provide their own aluminized mylar (available at Smith's Pharmacy or Canadian Tire) to cover the hospital mattress.

j) The patient may use T.V. if they tolerate it.

Cleaning

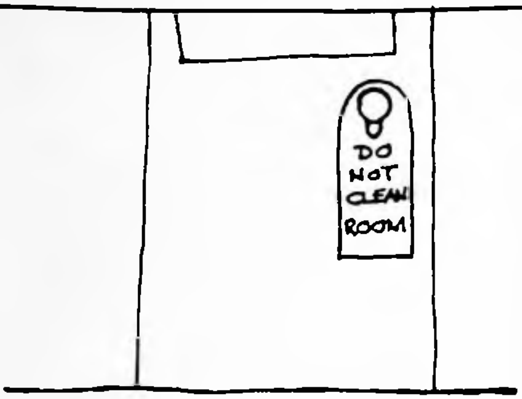
a) Detach the bathroom deodorizer and scrub the tiles and grout behind it with vinegar and water (if tolerated), until it is odour free.

b) Patient should test (or supply their own) hospital soap and mouth wash for tolerance.

c) Instruct the staff to clean with vinegar and water ONLY, or the patient can provide their own cleaning supplies.

d) No scented or strong cleaning products or deodorants should be used in the corridor near the entrance to the patient's room.

e) It is requested that the cleaning staff clean the patient's room first thing in the morning, using clean mop and clean water.



Personal Care

a) The patient will supply his or her own soap and towels and all personal care needs.

b) The patient will supply their own bed linen and pillows. These items should be labelled and should NEVER leave the patient's room except to return home for laundering.

c) A shower or bath should be performed early in the morning before the washroom is used by other patients.

Food and Water

a) Before admission, arrangements must be made with the head dietician to implement the patient's rotary diversified diet.

b) Depending upon the needs of the patient, pre-cooked foods can be provided from the patient's home.

c) The patient will supply their own water and own mug or drinking glass.

d) The patient will not eat or drink hospital food or beverages.

e) The patient should not be permitted to purchase or be provided with any foods or beverages other than those specifically prescribed by the doctors, e.g., mineral waters, pop, candy, "junk foods".

J. F. Maclennan, B.A., M.D., F.A.C.A., F.A.A.E.M.

FOOD & NUTRITION

ASTHMA, HIVES AND OTHER REACTIONS TO FOOD ADDITIVES

Canadians eat about 6 - 11 pounds of additives every year. There are about 20,000 additives which can be found in our foods, beverages and medications.

Symptoms which may result from ingesting additives are hives (urticaria), asthma, behaviour/central nervous system, irritable/inflammatory bowel, purpura (breakage of small blood vessels), exfoliative dermatitis (the skin strips, very painful and disfiguring). The incidence of suspected reactions to food additives is between .01% and .2% of the population.

Urticaria

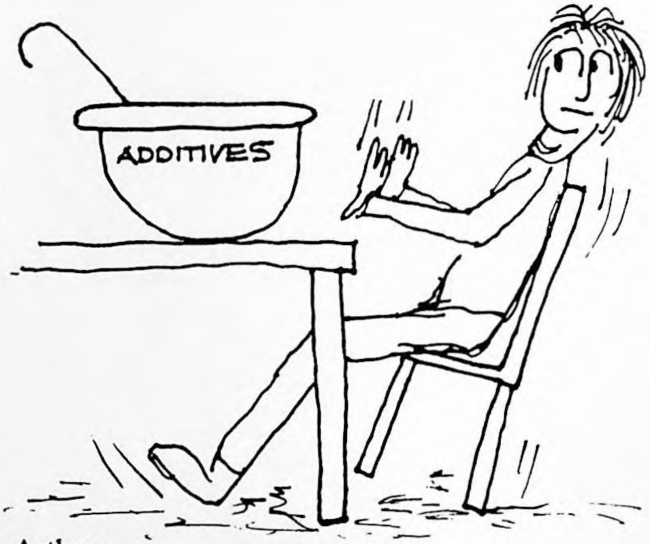
The additives which have been identified as triggering hives are: benzoates, sorbates, azo dyes, other dyes especially tartrazine, BHT/BHA (parabens), nitrites, spices, ethanol (ethyl alcohol), and aspartame.

One researcher found that 30% of his study group, adults with chronic hives, reacted to food additives. Another researcher studied children with hives and found that 24 out of the 43 children in the study group reacted to food additives.

It is very difficult to do a study using people with chronic hives. The severity of chronic hives naturally waxes and wanes. When the study is designed, the person has to go off the antihistamines which relieve their symptoms. The question becomes: was the outbreak of hives due to the challenge with the food additive or was it caused by the withdrawal from medication?

There are other skin reactions which can be caused by food additives.

Contact hives: spices, vegetable gums, di and tri-glycerides, balsam of peru and its host of compounds.
Contact dermatitis: parabens, Vitamin E, BHA
Irritant dermatitis: emulsifiers, bleaching agents.
Eczema: tartrazine, benzoates, MSG, sulfites.



Asthma

The additives which have been identified as triggering asthma are: tartrazine, sulfites, MSG, benzoates, azo dyes.

Studies have been done to show the link between asthma and food additives. Again, such studies are difficult to design because of the natural fluctuations in the severity of asthma, plus the role of withdrawal of medications.

The clearest link between food additives and asthma is with the sulfiting agents used as preservatives. It is estimated that 15% of those with severe asthma suffer from a reaction to sulfites. Only .8% of mild asthmatics are troubled by sulfites. All asthmatics who react to sulfites will develop asthma when inhaling sulfites in the form of sulfur dioxide. When sulfites are in an acid solution, such as with fruits or wine, 70% of asthmatics are affected. Only 10% of asthmatics will react when sulfites are administered in a capsule. The incidence of asthmatics reacting to sulfite on the skin is so low it is statistically insignificant. Many mysteries remain: when sulfite is on lettuce, it usually causes a reaction, but when sulfite is on seafood, such as shrimp, it usually does not.

Another common additive, MSG, seems to cause late phase reaction. Thus it is difficult for an affected person to track down the connection. Who would link the MSG in their soup eaten at lunch with an asthma attack experienced while watching television in the evening?

Behaviour/Central Nervous System

Aspartame may occasionally cause headaches.

The number one complaint associated with MSG is headaches, number two is nausea and number three is diarrhea. Other symptoms reported include palpitations and dizziness.

Conclusion

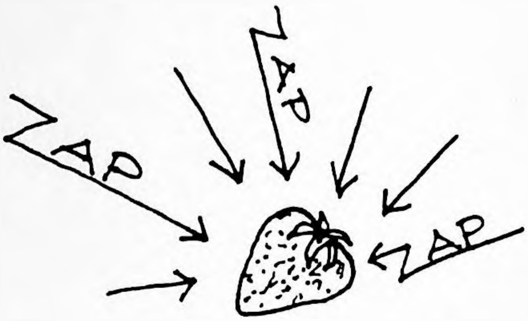
With so many food additives available and ingested, there is a risk that people will experience adverse reactions to these substances. Much research is needed. Food additives are now evaluated as to whether they are toxic (poisonous), carcinogenic (cancer causing) and if they cause fetal abnormalities (affect babies). It would seem sensible to also include the chance of adverse reactions in the criteria for evaluating food additives.

Reference: Presentation by Robert K. Bush, M.D., University of Wisconsin, Madison WI to Food Directorate Seminar, Health and Welfare Canada, February 17, 1992.

Reprinted from Allergy/Asthma Information Association Quarterly Volume 28, Summer 1992.

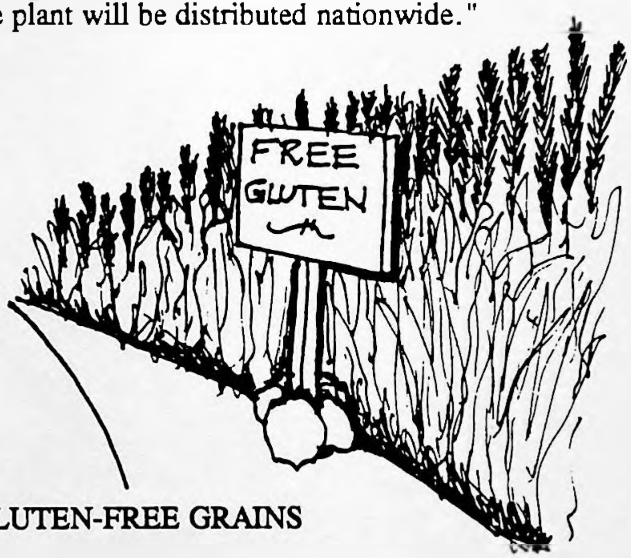
SYNTHETIC ADDITIVES

As a result of the discoveries by Dr. Feingold that eliminating synthetic colours, flavours, BHA, BHT and TBHQ from children's diets can lessen or eliminate their hyperactivity, non-profit volunteer organizations called Feingold Associations were founded in 1976. Their purposes are to support their members in the implementation of the Feingold program and to generate public awareness of the potential role of foods and synthetic additives in behaviour, learning and health problems.



FOOD IRRADIATION

Beatrice Trum Hunter reports in Health News and Review, Fall 1992 that "in January 1992 the first commercial food irradiation plant in the United States began operation in Florida with treatment of strawberries. The processing plant expects to extend treatment to citrus fruit. If treatment is approved for poultry, chilled birds will be trucked from major processing plants in Georgia and Alabama. All treated foods from the plant will be distributed nationwide."



GLUTEN-FREE GRAINS

Spelt, kamut, wheat, rye, barley and oats contain gluten that is free to enter into reactions as it goes through digestion in the body. Rice, corn, amaranth, buckwheat, quinoa, milo and teff contain traces of gluten that are supposedly "chemically bound". They are referred to as EGF - essentially gluten free.

BUILDING & RENOVATIONS

KEEPING COSTS DOWN

Non-toxic and environmental construction is often less costly in the long run, when you consider durability, lifespan of products, household maintenance and heating costs over the lifespan of a home. However, in many instances, it involves a higher upfront cost.

Every job has a budget, however when dealing with non-toxic construction (or building for hypersensitive individuals), materials are prioritized according to toxicity, and only then are environmental issues, aesthetics and budget taken into consideration. In many cases there is only one item or product which may be tolerated, and thus falls into the "non toxic" category, regardless of budget.

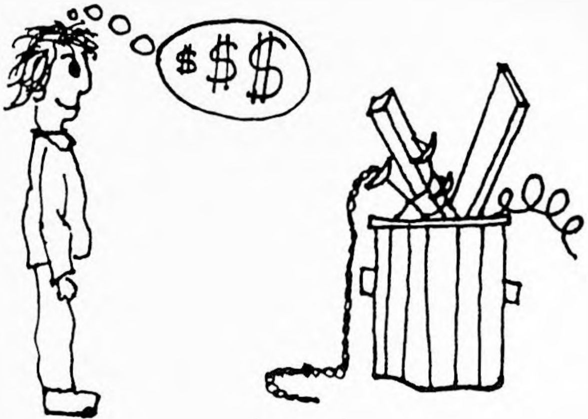
Non-toxic construction deals with innovative ways of providing "healthy" housing and part of that innovation is juggling between budget constraints and product constraints.

One way of keeping costs down is to slow down the whole process and spend a greater period of time in the planning stages. If you have a good grasp of what materials will be required, you and/or your contractor can look for them at yard sales, flea markets, and the numerous used building material stores cropping up across the country. This takes time, but it can be extremely rewarding and fun.

Construction and renovation waste accounts for up to 30 per cent of all landfill garbage, much of it being usable or reusable. "Beauty is in the eye of the beholder", as they say. The lower cost of used materials can often tip those beauty scales.

With large volumes of "reusable" material being thrown out by builders, renovators and manufacturers, used building centres are becoming familiar sites. These stores give new life to materials which would otherwise have ended up in the dump.

Disposal fees have risen dramatically in the last five years, with no end in site. Currently, dumping fees in Toronto are approximately $150-200 per tonne. Most home owners are unaware of the percentage of the total budget allocated to disposal fees. If you are renovating, you may save substantially on disposal fees by bringing any "reusable" materials to these second-hand stores. Don't throw anything out without verifying with your local used building centre first. You might think it's garbage but they may think otherwise.



The inventory varies greatly from store to store and from day to day. Some stores are more like antique stores than building centres and vice versa. If you know exactly what you need, you may want to call ahead to be sure they have your item in stock. Or you can take the treasure hunt approach and go without calling to poke around and see what you can find. Personally, that's my favourite way of doing it.

Items usually found at used building stores range but generally fall into the following categories:

lighting fixtures
plumbing fixtures - toilets, sinks, tubs, faucets
windows and doors - new and used
fireplaces
mantles
ceramic tiles
paving stones
siding
kitchen sinks
kitchen cabinets and counter tops
drywall scraps
electrical supplies
panelling
ceiling tiles
heating fixtures
office furniture
household furniture...
you name it, you may find it.

Used building stores can be great but they are not for everyone. They have their advantages and disadvantages.

Some of the advantages are:

- They may provide a cost savings.
- You may find new material which has been rejected because of errors in size or colour, but is perfect for you.
- Toxicity of products may be reduced due to the age of the product. For example, older kitchen cabinets may have off-gassed and be "less" toxic than new ones.
- If the product you want is completely out of your budget for the time being, you may be able to find something to tide you over until you can afford your product of choice. You may have to compromise on toxicity or aesthetics in the short term in order to obtain the perfect solution in the long term.
- Changing the job to accommodate the products available may give you a more unique and original look.

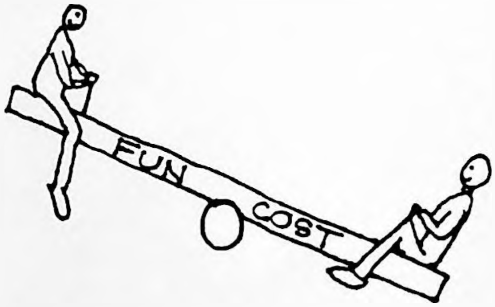
Some of the disadvantages are:

- It is a "buyer beware" situation. You should know your needs and/or sensitivities.
- You should know a bit about building materials "ingredients" and their history in order to determine their toxicity level in relation to your sensitivities.

  For example:

  - Old windows and doors may be painted with lead-based paint, oil-based paint, or paint that is not well tolerated by you or your family.
  - Kitchen cupboards and counter tops may contain phenol formaldehyde or urea formaldehyde resins.
  - Used kitchen cupboards and counter tops may have been sprayed with pesticides.
  - Used or recycled paints may not meet your "non-toxic" standards.
  - Old fluorescent fixtures may contain PCBs.
- The product you need may not be available when you want it. This is where the waiting and planning comes in.

All in all I think the advantages outweigh the disadvantages as long as you know what you are getting into and you put an element of fun into it.



We have compiled a list of used building centres across the country. If you know of a store which is not included in this list, please let us know so we can include it for future reference.

HABITAT RESTORE Waterloo, 519-747-0664
Winnipeg, 204-654-1965

HOBO HARDWARE Guelph, 519-824-1666

OTTAWA RESTORE Ottawa, 613-825-8900

P & B USED & NEW BUILDING MATERIALS Surrey, 604-588-1311

REUSE BUILDING CENTRE
Burlington, 416-319-0477

REUZE BUILDING CENTRE
Toronto, 416-750-4000

THE IMAGINATION MARKET
Nanaimo, 604-745-7036
Yukon, 403-426-1862

THE RESTORE STORE
Brantford, 519-751-0922

Marianne Bertrand

INDOOR AIR

ILLNESS FROM CARPETING

Physiologist Rosalind Anderson kept hearing about people who said their carpet made them sick, so she decided to conduct her own research.

Using standard test methods, she exposed mice to air blown over carpet samples from local stores.

Nothing significant happened.

Then, as word of her study got out, people from New York to Arizona began sending pieces of their "bad" carpets to her Dedham, Mass. laboratory.

Anderson was skeptical: "I told a man in Texas, 'You're out to lunch'. I thought he was a kook." But she tried again, with the snippets of carpeting people had sent her.

And she was stunned when they worked like nerve gas on the hapless mice.

The creatures gasped, turned blue, lost their balance, suffered paralysis and lung hemorrhages. Within four hours, many died.

"Deaths all over," said the scientist.

Anderson's fundings, announced last week, sent a tremor through government regulatory agencies and the carpet industry.

For years, some consumers have blamed new carpeting for everything from flulike symptoms, rashes and asthma to death. And for years, government and industry officials alike have assured consumers that there is no proven link between carpet fumes and health problems.

Now, they're scrambling to examine data from Anderson Laboratories Inc., Anderson's small five-year-old consulting firm, which studies the effects of smokes and gases.

To have animals die is "extraordinary" and "surprising", said John Girman, branch chief in the Environmental Protection Agency's indoor air division.

Ron Van Gelderen, president of the Carpet and Rug Institute, a national trade association, said Anderson's news had "framboozled" his members. "We are very anxious to find out what's going on."

So is Anderson. Like everyone else, she has only theories about what's going on. The only thing she knows for sure is that fumes from eight of the nine carpet samples - various types, brands and ages - killed mice.

Anderson concluded that whatever harmed the mice was also affecting the humans who sent the samples - a conclusion that government and industry officials aren't yet prepared to accept.

Anderson said she "hasn't a clue" to whether the toxic agent, whatever it is, is a result of manufacturing, or shipping and handling, or installation, or carpet cleaning fluid - or something else altogether.

Various studies have focused on the chemical that causes the characteristic "new-carpet odor": 4-phenylcyclohexene, or 4-PC, a byproduct of the latex binder used to hold carpet fibers together.

But even if 4-PC is the culprit, or one of the culprits, there is no readily available substitute for it, according to something called the Styrene Butadiene Latex Manufacturers Council.

Anderson, who said she had neither the money nor the facilities to thoroughly test 4-PC, said she believes that it is not the only problem.

"Everyone would like to find a 'bad guy'", she said. "I have a feeling we are looking at an unfortunate combination of medium guys that are terrible when put together."

For years, the EPA and the Carpet and Rug Institute have conducted studies. Last year, they completed a year long "dialogue" about indoor air quality with related industries, environmentalists, the American Lung Association and others.

But so far there is "no link between adverse health effects and the levels of chemicals emitted by new carpet," according to a 1992 Carpet and Rug Institute brochure.

Still, the Consumer Product Safety Commission has received hundreds of complaints about carpet in recent years - including one from EPA workers. In 1988, the EPA removed new carpeting from its Washington headquarters after 122 staff members complained of adverse reactions.

Two men died while using carpet adhesives to install carpeting in boats, according to safety commission records obtained by New York Attorney General Robert Abrams.

Last year, Abrams and the attorneys general of 25 other states - including Pennsylvania and New Jersey - petitioned the safety commission to require health warnings on new carpet and installation materials. The warnings would list possible adverse reactions and advise consumers to take such precautions as fully ventilating newly carpeted rooms.

The CPSC has refused.

"We evaluated it, and...the idea was considered premature," said Skip Schaeffer, director of the commission's health sciences division.

For Charles Fitzgerald, the idea is too late.

In 1989, he said, he enlarged Lighting Limited, his 10-year-old lighting fixtures store outside Baltimore. Suddenly, a longtime salesclerk began suffering severe headaches. Then Fitzgerald, his wife, his son - even vendors who spent a few days in the store - experienced headaches, sore throats, slurred speech, dizziness, forgetfulness, chest pains.

They suspected that new carpeting was the problem, but the federal Occupational Safety and Health Administration couldn't confirm it.

"We couldn't figure it out," Fitzgerald said. "We used to joke about it. We were going to call ourselves Chernobyl Lighting."

Last year, Fitzgerald decided to move his store, despite the huge cost.

"We bought carpet from a different shop and had it installed in the new store. Within days, the same thing started all over again," Fitzgerald recalled. "That's when I said it must be the stupid carpet."

Air blown over a piece of Fitzgerald's latest carpet proved to be lethal to Anderson's mice, but that wasn't all: an air sample taken from the new store also killed mice.

"Very frightening," Anderson said.

Terrifying, said Fitzgerald. He is now going out of business, he said. And, like other carpet complainers, he and his family now claim to have bad reactions to such innocuous products as perfumes and hand lotions. "It's destroyed my business," he said. "It's destroyed us."

Such accounts add to the debate over whether so-called chemical allergies are real or psychosomatic.

Mary Lamielle of Voorhees, who founded the National Center for Environmental Health Strategies in 1986 after becoming allergic to common household products, has testified before Congress that the problem of "chemical sensitivity" is very real. "I think," Lamielle said, "what you're finding now is a great influx of chemicals and chemical processes that, from the manufacturer's perspective, are designed to make the product better, cheaper, whatever - without looking at whether these chemicals are stable in the product and without looking at the implications for human health."

A lot of people are looking now.

"There are so many questions raised at this point, and they deserve answers," said Van Gelderen, of the Carpet and Rug Institute. "It's going to take a mammoth effort to find the answers."

Reprinted with permission from The Delicate Balance, 1100 Rural Avenue, Voorhees, N. J. 080403, (609) 429-5358.

TESTING CARPET SAMPLES

Anderson Laboratories tests carpet samples by exposing four mice to carpet fumes for one hour each day over a four day period. Scientists observe neuromuscular and respiratory reactions. According to General Manager Mark Goldman, the results may substantiate a client's reaction to toxic carpet but are not suitable for a legal case. The cost is $380 (U.S.).

The Massachusetts lab also performs computerized respiratory testing in accordance with ASTM standards. The results are suitable for a legal case. The cost is $3,500 (U.S.).

Here are some highlights of recent findings:

- Anderson Laboratories has performed 40-50 tests for clients. These carpet samples come from residences, hotels, and a Washington state college.
- All but one sample caused neuromuscular and respiratory problems in exposed mice.
- 25% of randomly purchased carpet samples tested by Anderson Laboratories produced neuromuscular and/or respiratory symptoms.
- The Carpet and Rug Institute hired a scientist at the University of Pittsburgh School of Public Health to replicate the Anderson Lab Studies. The results were the same.
- Pathological examination of 4 of 5 symptomatic mice showed muscle and kidney degeneration. There were no changes in the controls.
- Pathological examination of one mouse that died showed muscle, kidney, and brain degeneration.

Anderson Laboratories Inc. is an independent laboratory specializing in the effect of airborne chemicals on biological or electro/mechanical systems.

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The National Toxics Campaign Fund in Boston has been testing carpet samples for the last two years. Scientists at the non-profit have tested approximately 40 samples for semi-volatile chemicals. All carpet has had some level of 4-PC (4-Phenylcyclohexene), a byproduct of the latex binding on carpeting and a chemical implicated by some in toxic carpet. They've also identified phthalates and dichlorobenzene in other samples. The charge is $160 (U.S.).

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See CARPET RESOURCES (next page) for US sources of carpet publications, questions and testing.

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CARPET RESOURCES

BROCHURES/PUBLICATIONS:

INDOOR AIR QUALITY AND NEW CARPET: WHAT YOU SHOULD KNOW
EPA/560/2-91-003, March 1993. Free.
U.S. EPA IAQ INFO, (800) 438-4318, or write:
Consumer Information Center, Pueblo, CO 81009

CARPET POLICY DIALOGUE. COMPENDIUM REPORT
PB92-115005, September 27, 1991.
National Technical Information Service, 5285 Port Royal Road, Springfield, VA 22161, (703) 487-4600. Price: $77(US) and $3(US) handling.

A GUIDE TO CARPET AND YOUR INDOOR ENVIRONMENT AND INDOOR AIR QUALITY PROGRAM FOR CARPET
The Carpet and Rug Institute, P.O. Box 2048, Dalton, GA 30722-2042, (800) 882-8846

CARPET FACT SHEET INCLUDES MEDIA COVERAGE, UPDATES, AND EXCERPTS FROM The Delicate Balance, National Centre for Environmental Health Strategies, 1100 Rural Avenue, Voorhees, New Jersey 08043, (609) 429-5358. Price: $1(US).

TOXIC CARPET III, Glenn Beebe, 368 pages, 1991. (Review - see The Delicate Balance, Vol. IV, Nos. 3-4, 1991.) Write: Glenn Beebe, P.O. Box 399086, Cincinnati, OH 45239. Price: $9.95 (U.S.) plus $3 (US)postage and handling.

CARPET COMPLAINTS/QUESTIONS

U.S. Consumer Product Safety Commission,
(800) 638-CPSC
U.S. CPSC, Carpet Complaint, Office of the Secretary,
Washington, DC 20207

U.S. EPA TSCA ASSISTANCE INFORMATION SERVICE,
(202) 554-1404, or write:
U.S. EPA, TS799, 401 M Street SW, Washington, DC 20460

U.S. EPA IAQ INFO
(800) 438-4318

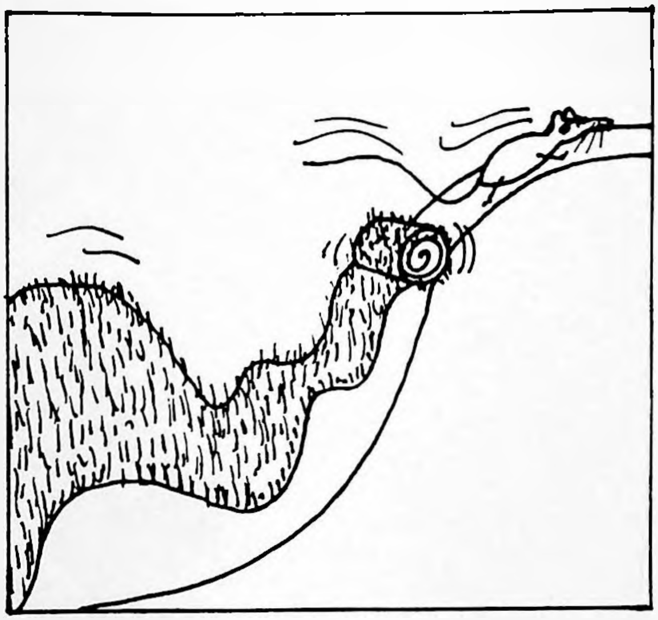
NEW YORK STATE ATTORNEY GENERAL'S OFFICE
NY State Attorney General's Office, Consumer Frauds Bureau, Attn: Rona Brown, 120 Broadway, New York, NY 10271

NATIONAL CENTER FOR ENVIRONMENTAL HEALTH STRATEGIES,
(609) 429-5358
NCEHS, 1100 Rural Avenue, Voorhees, New Jersey 08043

CARPET TESTING

ANDERSON LABORATORIES, INC., 30 River Street, Dedham, MA 02026, (617) 364-7357

NATIONAL TOXICS CAMPAIGN FUND, 1168 Commonwealth Avenue, Boston, MA 02134, (617) 232-0327



THE CARPET POLICY DIALOGUE

The (Environmental Protection) Agency recently completed a year long "dialogue" with carpet floor covering industries, unions, public interest groups, and other Federal agencies to explore ways of reducing the emissions of VOCs from new carpet and related installation materials, such as carpet cushion and adhesives. As a result of this voluntary process, the carpet industry agreed to test new carpet floor covering materials for total VOC emissions and is exploring ways of lowering emissions of VOCs from carpet products. Most importantly, the industry has undertaken an extensive consumer education program in cooperation with other dialogue participants, designed to provide the public with information on the role that carpet products play in indoor air quality and ways that consumers can make informed purchase decisions. EPA expects to conduct similar discussions with other industry groups to determine whether additional reductions in indoor pollutant emissions can be achieved through voluntary actions.

Reprinted with permission from *Targeting Indoor Air Pollution, The EPA's Approach and Progress*, 401 M St., SW, Washington DC, 20460 (202) 260-2080.

OUTDOOR AIR

TOXINS LINKED TO WASTE BURNING

The U.S. government has found traces of highly toxic compounds in the products and emissions of U.S. cement manufacturers that burn chemical waste - including those of a company that wants to introduce the practice to Nova Scotia.

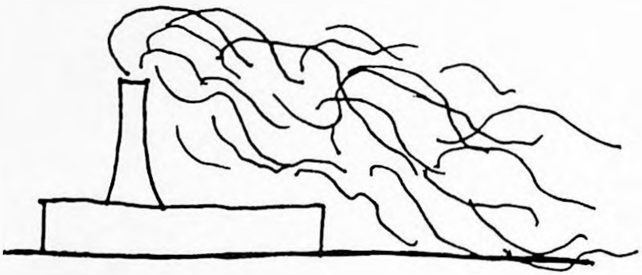
According to a confidential study by the U.S. Environmental Protection Agency, plants that incinerate tainted oils and solvents during production produce finished cement powder and waste dust containing a variety of contaminants.

The EPA analysis - conducted for a report to Congress - uncovered higher than expected levels of such metals as arsenic, chromium, cadmium, beryllium, thallium and lead. But the biggest surprise, says Bill Schoenborn, who supervised the testing, was the presence of such highly toxic pollutants as dioxins, furans and cancer-causing benzene.

The EPA tests, the first of their kind, involved samples from 15 of the 114 cement kilns in the United States - eight that burn hazardous waste and seven that do not. Finished powder and dust from the eight "burners" were found to contain much higher levels of toxic metals than those fuelled by coal or natural gas alone. (However, three regular kilns located near plants that produce nuclear weapons registered trace amounts of radioactive plutonium.)

Mr. Schoenborn said it is too early for the EPA to assess whether the findings pose a serious health hazard, but "the fact that we found dioxins, furans and plutonium at all makes the test results significant". As a consequence, before the report is presented to Congress, the EPA and the cement industry will conduct further tests at six kilns over the next two months.

Currently, only one Canadian plant - St. Lawrence Cement Inc. in Mississauga - burns hazardous waste, a practice it began with the province's blessing in 1975. But Lafarge Canada Inc., a subsidiary of Lafarge Corp. of Reston, Va., has asked an environmental-review panel in Nova Scotia for permission to incinerate up to 27 million litres of toxins a year in its cement kiln at Brookfield, near Truro.



David Carter, who lives a few hundred metres from the plant, said in a telephone interview that local residents fear their lives could become "a nightmare" if the company fails to meet the rigorous environmental standards it has promised, as has happened with at least three of its U.S. kilns.

A copy of the EPA's preliminary report shows that incinerating hazardous waste during cement manufacturing appears to increase both the amount and toxicity of the waste dust that is produced. Some dust blows out of the kilns' stacks - whose emissions were not included in the tests. But most ends up in landfill sites or, because it is alkaline, is sold to farmers to condition acidic soil.

The industry was "very surprised at what they (the EPA) found," said Richard Creighton, executive director of the Cement Kiln Recycling Coalition in Washington. Producers, he explained, have found no dioxins and furans in their own tests, and are "very, very concerned about this. The industry has no desire to imperil human health or the environment."

In its summary of the potential health risk, the EPA expressed greatest concern over the levels of arsenic, chromium, lead, dioxins and furans - as well as a variety of radioactive compounds - it found in the waste dust.

The agency's findings provide a snapshot of operating conditions at kilns that dispose of chemical waste, said Edward Kleppinger, a Washington scientist and critic of the practice. However, he said, a more serious health hazard could arise from long-term accumulation of the toxins in the environment.

"We're poisoning ourselves through these toxic emissions," said Mr. Kleppinger, who has calculated that cement kilns produce 3,000 tonnes of lead each year. "That's between 5 per cent and 10 per cent of all lead emissions in the U.S."

Because the EPA found that finished cement contained many of the same contaminants as the dust produced by the kilns, he added, it is possible that public drinking water, which most cities supply through concrete pipes, may be affected in years to come.

As for the 5.5 million tonnes of cement dust the U.S. industry generates every year, an EPA official said, 105,000 tonnes were sold as soil conditioner in 1990, while another 640,000 tonnes were used to solidify chemical waste or sewage sludge for disposal in landfill sites.

During the Reagan presidency, this dust was classified as non-hazardous waste, but Mr. Kleppinger said the new EPA data could motivate Congress to reverse that decision. EPA and state sources also said the Clinton administration will consider a moratorium on new hazardous waste incineration until more is learned about its impact on the environment and human health.

In the past decade, destroying unwanted byproducts of industrial production has become a highly lucrative sideline for many U.S. cement makers. They can earn as much as $10 a kilo by blending waste oil, solvents and solids and injecting them into the kilns during production. The EPA's ban on dumping liquid chemical wastes in landfills drove up disposal costs for industry and drew cement makers into the business. By undercutting prices charged by licensed hazardous waste disposers, cement makers are now handling more than 50 per cent of all U.S. burnable chemical wastes.

The industry has argued that subjecting the waste to an average temperature of more than 1,400 degrees Celsius ensures complete destruction - a position that environmentalists say is challenged by the EPA findings.

Residents in Mississauga, a densely populated community just west of Toronto, have complained for 15 years about St. Lawrence Cement, which disposes of about 3.5 million litres a year of highly chlorinated waste solvents and plastic residues drawn from industries in Ontario and the United States.

The plant has never been required to test for toxic residues, a policy the provincial Environment Ministry hopes to change with new operating rules it is negotiating with the company.

Residents also are leery of the dust emitted by the plant's 165-metre-high smokestack. Given the absence of tests, "St. Lawrence has no factual basis to say that its air emissions are not environmentally harmful," said Julie Dart, who represents a local citizens' group.

Plant manager Charles Coles said the kiln's high temperature destroys all of the hazardous waste, but the province is seeking reassurance. John Budz, an Environment Ministry official in nearby Oakville, said he wants the company to install continuous monitors to measure both how efficiently its kiln burns and just what comes out of its stack. In tests done in January to measure the volume of dust from its smokestacks, the company founds its stack effluents while burning hazardous wastes were 10 times greater than when the wastes were not being burned.

Laidlaw Environmental Services Ltd. operates a specially designed incinerator near Sarnia that burns at a lower temperature than cement kilns - 1,000 degrees. However, it does not dispose of the highly toxic chlorinated wastes that produce dioxins and furans. Also, the company is required to monitor emissions continuously and conduct an annual emission audit for the presence of 60 toxic chemicals.

Two years ago, the U.S. hazardous waste industry joined several environmental groups in filing suit against the EPA to force cement companies, along with any steel mills and other industries that burn hazardous wastes, to meet the same strict standards required of its members.

Written by *Jock Ferguson*. Reprinted with permission from *The Globe and Mail*, February 15, 1993. 444 Front Street West, Toronto, Ontario, M5V 2S9, 416-585-5000.

WOOD PRESERVATIVES AND PLAYGROUND EQUIPMENT

35pp. Aug. 1988. Critical look at the common arsenicals in pressure treated wood such as chromated copper arsenate. Free from California Dept. of Health Services, Hazard Identification and Risk Assessment Branch, 2151 Berkeley Way, Berkeley, CA 94704. (415) 540-3063.

LAWN CARE WITHOUT PESTICIDES

The use of pesticides on lawns has grown considerably. Urban gardens and lawns are now receiving heavier pesticide applications than most farming acreages. (1) Homeowners are increasingly employing lawn services who apply various fertilizers, insecticides and herbicides. Commonly used lawn care chemicals are killex (2,4-D) and round-up (glyphosphate) which can cause skin rash, eye irritation and are classified as possible human carcinogens. Diazinon and dursban (chlorpyrifos) which can result in blurred vision, headaches and tightness in the chest, are also used. (2)

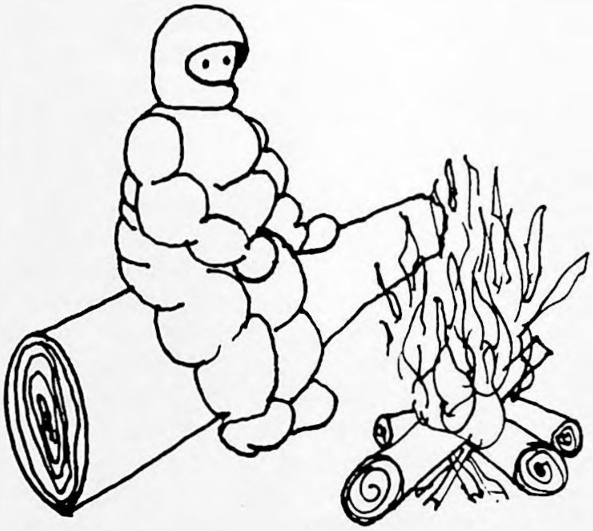
Pesticides don't just stay where they are applied. They drift in the air. They seep into the soil and then migrate into trees, vegetable gardens and well water.

A number of people have developed environmental sensitivities because of a high one-dose exposure to a pesticide. Children are most at risk because they play in intimate contact with the grass. and their skin is thin and can easily absorb these substances, before their immune systems are fully developed.

Pesticide Action Groups across the country are lobbying to eliminate the "cosmetic" use of pesticides on lawns. They also have factsheets on how to maintain a lovely lawn without pesticides. Write to the Pesticide Action League, 31 Ballyronan Rd., North York, Ontario M3B 1V2 or contact a local group.

(1) Steve Driestadt. "Our Cities: More People and More Pesticides Per Acre." NCAP News, Summer 1984, p.2.

(2) Karen Snyder and Nancy Shute. "Toxic Green." The Amicus Journal, Summer 1987, p. 15.



ANOTHER REASON NOT TO HAVE FIRES

An article in Alternatives (Vol. 19, No. 3), notes that "Stewart Farber, the manager of environmental monitoring at a nuclear power plant in Massachusetts, discovered that wood ash from his home fireplace was 100 times more radioactive than any other sample he had ever checked". After further studies, he concluded that the higher radioactivity levels are common to most of the North American continent east of the Nevada nuclear bomb sites, and are probably a result of prevailing winds blowing radioactivity from nuclear bomb testing.

SCHOOLS

ENVIRONMENTAL SCHOOLS

West Humber Collegiate in the city of Etobicoke, Ontario, has two reasons to celebrate this year. The secondary school is observing its twenty-fifth anniversary as well as applauding its new focus.

Staff and students have decided that they will not be pawns to the dramatic changes occurring all around them. As the Western world insists on consuming more and more, and as free-market societies fund and support "development" in third world countries, they are turning their attention to those elements that sustain life on this planet: the air, the water, the soil and the trees. They have decided to make a positive difference to life on the planet by becoming a focus school that will pilot and share environmentally-sound curriculum.

This decision is the result of a process that began in the 1989-90 academic year. In March, 1990, Skid Crease, Program Leader for Outdoor Education for the North York Board of Education, conducted student assemblies on environmental issues. In April, the students of West Humber organized a Humber Valley cleanup, and a school recycling program was implemented by the students' council. A tree planting event was held and environmental concepts and issues became a part of all staff letters, staff meetings, newsletters and student magazines.

A Strategic Planning Committee gathered information regarding what the school did, did not do, and should do. Students, staff and parents completed questionnaires. The results of these surveys, distributed with report cards in June, gave evidence of a strong interest in both academics and in the environment.

In the fall of 1990, the Strategic Planning Committee expanded and all staff were invited to join. This committee developed the school's mission, values and beliefs in cooperation with students and parents' groups.

In October, 1990, all staff members were interviewed individually to assess their interest in and concern about moving towards an environmental focus. In November, school professional development day was devoted, in part, to the merits of an environmentally focused collegiate. In addition, an environmental focus school action plan was presented to senior administration. This group showed their support for the idea by allocating special funds and reassigning a West Humber Collegiate teacher to act as environmental project coordinator. This support proved vital in developing momentum for the project.

West Humber Collegiate is very proud of its mission statement: "In a safe and caring atmosphere, West Humber Collegiate Institute will graduate individuals who advocate concern for the environment and act with an environmental conscience; who are able to anticipate and adapt to accelerating change and who can cause positive change; who strive for personal excellence; who explore a broad knowledge base with a global perspective; who are enriched by cultural diversity and not limited by economic circumstances."

With the mission, beliefs and values established, the development and implementation of this challenging initiative passed to a number of school based committees. Committee members consist of staff (including secretarial, caretaking and child care), students, parents, a trustee, program advisors, feeder school teachers, as well as other appropriate individuals.

The driving force for this project is the Environmental Steering Committee, which includes all committee chairpersons. This group's ongoing mandate is to do the planning, create the vision, develop the implementation tasks and time lines, and to assist the project coordinator in providing the necessary support and expertise to move the project towards a successful reality. The steering committee creates the ideas which are assigned to the appropriate subcommittees for implementation. These assignments then become the framework for the subcommittees' tasks.

The steering committee addresses this initiative from three perspectives: curriculum, buildings and grounds, and school activities.

The basic premise is that curriculum forms the foundation of the focus school concept. All too often, we expect students to accumulate theory without putting knowledge to practice. An environmental curriculum, we believe, must be interwoven with an environmentally sound school life style. This is essential to bringing substance to learning.

In addition, an environmental school must have the appearance of an environmental school. Incorporating plants, environmental posters, animals, birds and fish make this aspect real to the students.

The vital component in the planning and implementation of the project is meaningful and intensive student involvement. In preparation for an Environmental Symposium held in April this year, West Humber students enthusiastically arranged a second cleanup of the Humber River which flows by the school. They also worked with teachers to plan the format and guest list: For many students, the symposium was a landmark in developing their environmental awareness and determination to live a more environment-friendly lifestyle. A graduating student lamented that she hated to be leaving "now that school is so exciting and meaningful".

West Humber staff and students hope to develop approaches and programs that they can share. They have based their concept on the United Nations Intergovernmental Conference on Environmental Education which articulated three goals for environmental education:

- to foster clear awareness of and concern about economic, social, political and ecological interdependence;
- to provide every person with opportunities to acquire the knowledge, values, attitudes, commitment and skills needed to protect and improve the environment;
- to create new patterns of behaviour of individuals, groups and societies towards the environment.

West Humber Collegiate is working toward these goals in a cross-curricular program that will provide theory and practical examples of actions that can be taken to encourage behavioural change in the area of environmental issues. It will incorporate speakers, fieldwork and projects that will not only add knowledge, but also demonstrate commitment to make real environmental changes. Student-centered program delivery will provide the involvement so necessary for meaningful learning.

In May all department heads met for a day of environmental writing preparation. They analyzed environmental components in current courses of study, areas where environmental issues, although not part of the formal course outlines, were covered, and finally areas where each head felt that environmental issues could be integrated into the curriculum. The results of this session were given to an environmental writing team composed of ten teachers who will write environmental curriculum for existing courses in grades nine and ten this year, and in senior grades next year.

Environmental issues and approaches have already been integrated into many of West Humber's courses:

All Business subjects incorporate a unit on environmental issues such as environmental ethics. Typing classes recycle paper, and students have learned to use the photocopy machine efficiently so as not to waste paper. Two students from the Entrepreneurship class have participated in an environmental project contest sponsored by the Canadian Foundation for Economic Education.

In the English Department, one teacher related all independent study projects to environmental issues. Media Studies students made videos on environmental events in the school. Other teachers have been encouraging students to write letters to the editors of various newspapers. Several have had letters on environmental issues published. Grade nine students have gone for a walk along the Humber River, recorded the sights, sounds, and smells, and written poetry about the experience. Many of the students composed poetry which showed an appreciation of the environment and disgust for the way that the valley has been polluted.

The Geography Department has encouraged students to develop an appreciation for the emotional issues around Canada's natural resources. One teacher reserves a section of wall space for environmental comments. Environmental materials are available for all students. There's a recycling duty roster. Even the file cabinets have been painted forest green. Next year the department will be offering an environmental course at the grade twelve level.

Although environmental issues are not currently addressed in the Art curriculum, plants and animals have been the subject of many of the students' works. The department is working on eliminating oil-based materials. Teachers have designed units on what the environment could be like, on pollution and on other environmental issues. The photography class produced an excellent slide show on pollution in their city.

The Science Department is preparing its environmental course for grade ten, but already deals with issues such as the planet as a closed system, human interaction with the environment, and managing resources for long term sustainability. When other departments heard of the range of topics covered in the science curriculum, they saw many opportunities for working together on common units. As an example, the Science and Art Departments are cooperating in using flower presses to produce science field guides and beautiful sketches and photographs.

The Moderns Department is looking at how environmental issues are treated in Europe. For example, students on a trip to Paris noticed the smooth traffic flow, an observation which led to a discussion of the relationship between traffic flow and air pollution. A field trip to Quebec City will include an exploration of environmental sites suggested by the Science Department. Many French language environmental magazines and pamphlets are readily available and suitable for educational use.

The Music Department is putting together music on environmental issues for performance, listening and creativity. Students are also exploring noise pollution and becoming more sensitive to sound in an environmental context.

Although the Mathematics Department has a great deal to cover in core curriculum, teachers are using environmental issues as examples. In mathematics, environment is not the topic but a way to teach the topic.

In the ESL Department students have been saving pennies to buy bed kits for children in disadvantaged countries. They have also participated in field trips as a means of learning English as well as appreciating the surroundings.

Teachers in Family Studies look at environmental issues related to food and clothing. For example, a unit on cattle might examine the feed, pesticides and chemicals used and the nutritional value and preparation of meat.

The History Department sees environmental issues as having an important role to play, especially in their Economics courses.

The Technical Department is taking a new approach to teaching technology. Students are looking at emissions from fossil fuels, the use and reuse of tires, solar power and the use of alternate fuels. The emphasis is on discovering where our problems lie and considering how we can work together to produce something that is significantly better for us all.

Every subject discipline is committed to becoming more environmentally responsible and more holistic in its approach to education. This commitment on the part of teachers, students and administration is reflected in the school's belief statement:

We believe that:

- *each person must recognize and respect the individual worth and needs of others;*
- *we must practise and promote a respect and active concern for the environment;*
- *we benefit from different cultures, races, religions, ages, and genders working and learning together;*
- *the learning environment must be safe, caring and personal;*
- *individuals must take responsibility for their actions;*
- *staff, students, parents, and many other groups in the community are partners in the educational process.*

We know that there are no easy solutions to the environmental problems that confront us. However, as a community, we are experiencing a unity that comes from focusing our energies on a common goal. We are working with our students for a planet where all can live healthy lives.

Written by *Heather Goodson* who is an Environmental Coordinator at West Humber Collegiate Institute in Etobicoke, Ontario.

Reprinted with permission from *Green Teacher*, Issue 26, 95 Robert Street, Toronto, Ontario, M5S 2K5, (416) 960-1244.

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UPDATE

- In the spring of 1993 students successfully petitioned the Etobicoke Board of Trustees to stop pesticide spraying on school grounds in the Etobicoke School Board.
- Students from West Humber Collegiate and York Faculty of Environmental Studies are currently working together to develop approaches for school habitats which could be used at West Humber and other schools.
- Through a Global Connections Programme, there has been an academic exchange with Estero High School in Fort Myers, Florida. Estero High School has created the Estero River Project, which has significantly improved the water quality of the river. In May 1993 students from West Humber visited Estero High to learn and participate in the project. In the fall of 1993 students from Estero will be travelling to West Humber to learn about the water quality, as well as the differences in climate, landscape and minerals in Toronto as compared to Florida.
- The environmental cirriculum has been rewritten for a program which will be piloted by 10 boards in Ontario this year. Next year the environmental curriculum will rewritten for a national pilot.

Heather Goodson notes, "how ready people are to help once you've taken up the focus, people such as the Ministries, the Ontario Teachers Federation, pmople in industry, the University of York and University of Toronto's Faculty of Education. Whenever the school asked for help, people have been willing to come in and develop programs.".

BOOK REVIEWS

NONTOXIC VIEWS

We welcome your review of recent works. If you have read a book or seen a video that you would like to review, please do so and send it to Betty Auslander, 85 Walmsley Blvd., Toronto, Ontario, M4V 1X7.

Nancy Sokol Green. Poisoning our Children. Chicago: Noble Press, 1991.

Mrs. Green became very debilitated with chemical sensitivities. She did not start to regain her health until she found an environmental medical specialist who identified her allergies, got her to make lifestyle changes, and started her on a sauna detox program.

This book describes the changes she made in her home and life to get better and how this favourably affected the health of her husband and children.

The book exhaustively lists the potential sources of sensitivities, including pesticides, consumer products, and food and water problems.

Gillian Pritchard. "Safe Haven". Harrowsmith, April 1993, pp 52-55.

This lovely article details how a young couple renovate a house using products that won't hurt their health.

**T. Randolph and R. Moss. An Alternative Approach to Allergies.
New York: Harper and Row, 1989.**

This wonderful book, by one of the pioneers of clinical ecology, describes the steps and symptoms of chemical sensitivities; how to cope with food allergies using the rotary diversified diet; what kinds of chemicals often cause problems; and how clinical ecology differs from conventional medicine. He ends with a listing of food families that is more detailed than any I have seen.

Susan Rogers. "Ill Defined." Harrowsmith, April, 1993, pp 45-51.

This article looks at the field of environmental medicine through the experience of a patient, her doctor (Dr. Gerald Ross) and the Nova Scotia Environmental Medicine Clinic. It also describes what research various government departments are currently funding.

S. Rochlitz. Allergies and Candida with the Physicist's Rapid Solution. New York: Human Ecology Balancing Sciences, 1991.

The author of this very interesting book has recovered his good health and energy after a serious struggle with chemical sensitivities. His book summarizes the steps he needed to take to get well, i.e. avoidance of substances he was allergic to, a rotary diversified diet, muscle testing, and energy balancing via exercises and holding points on the meridians of the body. I was very surprised and delighted to find that doing these exercises and holds gave me a lot of energy.

Z. Rona. The Joy of Health. Toronto: Houslow Press, 1991.

In this easy-to-read book, Dr. Rona notes that conventional medicine is successful in making interventions like the setting of broken bones. He does not think it has been so successful in dealing with symptoms of general malaise, migraines, PMS and chronic fatigue. In an effort to be more helpful to his patients, he has researched holistic remedies and special diets like the candida diet, the rotary diversified diet and the carbohydrate specific diet. In this book, he shares what he has found to be useful.

**David Steinman. Diet for a Poisoned Planet.
New York: Harmony Books, 1990.**

The author begins by describing how chemicals are hurting our health. He then uses data from the FDA's Total Diet Study (which includes measuring pesticide residues on fresh and processed foods). From this data, he categorizes foods into ones which are always safe to eat, ones which are more problematic, and ones which should never be eaten if they are grown with chemicals. He puts peanuts and raisins into this last category. The information is interesting but an even better solution would be to eat only organic foods!

TIP SEEKERS

QUESTIONS .

...answers and tips that you may have on "safer" products or lifestyles are welcome. Please write to: The Tip Seekers, 85 Walmsley Blvd., Toronto, M6V 1X7.

QUESTIONS AND ANSWERS

Q. Does anyone know where I can buy safe cottons?

A. The Cotton Place, P.O.Box 59721, Dallas, Texas, 75229. (Bedding, household items, clothing). Free catalogue.

Pure Podunk, Podunk Ridge Farm, RR #1, Box 69, Thedford Centre, Vt., 05075. (Very pure natural wood and cotton bedding, clothing, etc.). Free catalogue.

Nontoxic Environments, 6135 NW Mountain View Dr., Corvallis, Oregon, 97330. (Vitamins, household products, bedding). Free catalogue.

L.L. Bean. Free catalogue.
1-800-221-4221

Land's End. Free catalogue.
1-800-356-4444

List is from *Allergy Alert*, Allergy Foundation of Canada, June, 1992, Box 1904, Saskatoon, Sask, S7K 3F5.

There is also a store by the name of Robin Kay, which sells numerous environemntal products, including clothing made from unbleached, natural cotton fibers. located at 348 Danforth Avenue, Toronto,. (416) 466-1211.

Q. I recently bought a used car. The inside smells terrible. The former owner had a lot of those pine scented objects hanging in it. What do I use to get rid of the smell? - N. L., Toronto

A. I hung a two pound bag of Zeolite in our car to eliminate the odour of cigarette smoke to which I am allergic. It worked. In fact, I hang a bag of Zeolite wherever there is an irritating ordour.

Zeolite is a natural mineral that literally takes odours out of the air. No cover up, no fragrance, no perfumes. Nothing to irritate an allergy or add to the gas/odour problem. Zeolite is a naturally-occurring alumia silicate compound with a negative ionic charge. The dust that carries your household gaseous odours has a positive ionic charge. Zeolite's negative charge attracts the positively-charged dust particles that carry our household odours and pulls them out of the air and holds them to its vast internal surface area.

Zeolite can adsorb formaldehyde, ammonia, hydrogen sulfide, carbon monoxide and carbon dioxide. Zeolite is usually sold in stores that have an environmental focus under the trade names Sodor, Fresh, Nonscents and Natura.

Information taken from an article in *Allergy Alert*, Allergy Foundation of Canada, Box 1904, Saskatoon, Sask, S7K 3F5.

Q. We recently moved into an old house. We made a TV room out of one of the upstairs bedrooms. Whenever any of us goes in there we develop a rash. My husband has the worst rash. What could it be? Who could we get to check out this problem? We have no new furniture and are using the same cleaners as in our previous home. Our family doctor wasn't very helpful. He suggested that the cause might be dry air in the house. B.A. , Toronto.

A. It can be quite difficult to pinpoint the exact substance or chemical that is causing the problem. There are some 100,000 chemicals available in the commercial marketplace and almost each one requires a different test to identify it. Homeowners are usually unwilling to pay for such testing at the going rate of $140 an hour, and so almost nobody is in the business of doing this. None of the levels of government are yet involved in this area.

Continued next page.

LEGAL ISSUES

PESTICIDE SPRAYING IN PARKS

On May, 1992, the Illinois Department of Human Rights issued a "Notice of Substantial Evidence" in three discrimination cases filed by chemically sensitive residents of Hinsdale, Illinois, a Chicago suburb. The residents claim that the Village's use of herbicides deprived them of access to community parks and most of the Village. At least one resident has had to leave the Village when spraying programs cause toxic chemicals to permeate the area. Two of the residents claim to have suffered physical harm due to the Village's refusal to accommodate their handicapping condition.

The original discrimination complaint, filed under the Illinois Human Rights Act, charged that the Village failed to fully investigate alternatives to the toxic spraying programs and to provide individual notification of spraying even after presented with medical documentation of their handicapping condition.

Earon S. Davis, the Evanston, Illinois attorney for the complainants, stated, "I hope this finding will lead to serious dialogue between the two sides. Chemical sensitivity is widely recognized as a handicapping condition, but like other disabilities, it is too often not taken seriously. To individuals disabled by chemical sensitivities, toxic pesticides present a barrier to participation in society. In the case of lawn care chemicals, these substances also pose health risks to the general public, especially children and people who apply them."

The Hinsdale case is the first in the United States where a municipal spraying program has been successfully challenged on the basis of depriving people of access to parks and other public areas.

Reprinted with permission from *The Delicate Balance*, 1100 Rural Avenue, Voorhees, N.J. 08043, (609) 429-5358.

Tip Seekers continued from previous page.

Another approach would be for you to remove the most likely sources of the problem and see if your rashes disappear. Wall-to-wall carpets are often a problem because of moulds or spills. Insecticides for fleas or other insects might have been used in that particular room. Petroleum solvents might have been spilled. Consider removing the wall-to-wall carpet and see if your rashes disappear. If you do the removal yourself, wear gloves, cover your body, and use a face mask to avoid further contact and inhalation problems.

Moulds could also be growing behind the wallpaper and spores could be entering the air and affecting your health. If removing the rug does not solve your problem, remove the wallpaper. It is also a good idea to keep the window in this room open until you resolve the problem. Hopefully, this will dilute the air pollution problem somewhat.

It is possible that your husband and other members of the family have now developed a sensitivity to the substance causing the problem and may now be more liable to develop other sensitivities. You can get checked for this by an Environmental Medicine Specialist. See the listings under the Canadian Society for Environmental Medicine.

B. A. Toronto, Ontario

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UNSOLVED QUESTIONS

1. How do I stop mould from forming on plant pots? R.N., Toronto
2. Does anyone know where I can buy a sweat shirt that doesn't give off formaldehyde? B.C., Toronto.

BOARD UPDATF

FROM THE BOARD

The Board of Directors has established itself as an effective working team. Any new group of people coming together for a common purpose needs time to learn about fellow group members and to appreciate and utilize the skills and strengths each one contributes. The summer of 1992 issue of The Quarterly (Vol. XIV, No. 2) introduced each of the Directors.

AEHA By-Law No. 1 specifies that the Board of Directors meet a minimum of four (4) times a year. Since the 1992 Annual General Meeting (AGM), this Board met six (6) times: another brief meeting was held following the 1993 AGM in Ottawa on May 29, 1993, and again in June. Besides items pertaining to any new or ongoing business, each Board meeting has standard elements such as a Treasurer's Report, Administration Report, and, more recently, the Communications Committee Report. With regard to financial reports to the membership, the Treasurer presents the annual financial report at the AGM, a copy of which will appear in The AEHA Quarterly.

From the outset, the Board of Directors identified editorial concerns and public relations as top priorities. To maximize effectiveness and to present a unified AEHA message, these elements were amalgamated as the Communications Committee, chaired by Jeanne Jabanoski. Committee members include Betty Auslander, Marianne Bertrand (co-editors, AEHA Quarterly), Neila Lem, Helen Coombs, and ad hoc members, Ed Lowans and Norene Anderson. The first issue of The AEHA Quarterly, since the inception of the committee and appointment of our new co-editors, is ample proof of skillful and enthusiastic teamwork.

Another prime consideration before the Board of Directors is the formation of a Fundraising Committee. Most members are aware that, in the past, Trillium (Ontario) funding had been granted for the purpose of leasing office space, hiring staff, etc. Terms attached to this award obligated AEHA to raise matching funds. As this expectation exceeded the capacity of the Association, requiring reimbursement of a portion of the unused funds. At present, membership fees cover the operating expenses of the association, which, given the economic climate, are being carefully monitored.

Last fall, the Board of Directors accepted, with regret, the resignation of Donna Powell, Operations Manager. We extend to Donna our utmost appreciation for her generous efforts on behalf of AEHA, along with our heartfelt wishes for renewed health and vitality. To ensure uninterrupted functioning, the Corporate Secretary assumed administrative duties, on an interim basis, related to national membership and operations. Plans are to set structures in place for a volunteer with recognized skills in both computers and management to fill this essential role.

The Board of Directors wishes to offer our heartfelt appreciation to the Ottawa Branch for their commendable efforts in organizing the 1993 Annual General Meeting held at St. Paul's University, Ottawa, on May 29, 1993. Special thanks to Elizabeth Stutt whose fine job as convenor, along with her able volunteers, resulted in a smooth flow of events based on a theme of housing for the environmentally sensitive. **THANK YOU ALL!!**

There is no doubt in our minds that involvement in AEHA requires a significant personal investment in time, energy and resources. As volunteer members of a vital organization, let us continue to support each other with generosity and good will. Whether more or less, great or small, every effort and contribution is vitally important. Have a great summer.

Norene Anderson
Corporate Secretary

PROFESSIONAL LISTINGS

PROFESSIONAL LISTINGS

We are developing lists of health professionals who work with the environmentally sensitive. If you are interested in having your name put on this list, send a letter describing the kind of services you provide to Betty Auslander, 85 Walmsley Blvd., Toronto, Ontario, M4V 1X7.

We are providing this list as a service to our members, however each member should decide very carefully who s/he wants to work with. Inclusion in these listings does not imply endorsement by the AEHA.

MEDICAL DOCTORS IN THE CANADIAN SOCIETY FOR ENVIRONMENTAL MEDICINE

Doctors, who are members of the Canadian Society for Environmental Medicine, mainly work with patients that have environmental sensitivity disorders like multiple chemical sensitivity, asthma, hay fever, dermatatis, chronic fatigue syndrome, candida and lupus. Most of these doctors have taken extra training in this area through the American Academy of Environmental Medicine.

F. Anello, M.D., Cambridge, 519-653-3731
J. Aubry, M.D., Sturgeon Falls, 705-753-2300
P. Bright, M.D., Mississauga, 416-564-0122
L. Gilka, M.D., Ottawa, 613-820-6118
R. Greenberg, M.D., Vancouver, 603-224-0196
A. Haque, M.D., Regina, 306-757-6688
J. Krop, M.D., Mississauga, 416-564-0122
J. Maclennan, M.D., Dundas, 416-628-8241
R. Mickelson, M.D., Glouchester, 613-830-5764
J. Molot, M.D., Ottawa, 613-235-6734
T. Polevoy, M.D., Waterloo, 519-888-0389
W. Tetz, M.D., Lacombe, 403-782-3513
M. Zazula, M.D. Mississauga, 416-276-7754

OTHER HEALTH PROFESSIONALS

H. Adirim, DDS, ND, Toronto 416-922-6866
N. Beserminji, MD, DN, Toronto 416-265-3309
D. Colson, DDS, Toronto 416-482-2133
L. Christian, ND, Willowdale/Oakville 416-226-4478
K. Kerr, MD, Toronto 416-927-9502
I. Korman, MD, Willowdale 416-222-3175
M.V. Miller, DDS, ND, Toronto 416-293-4119
A. Powell, MD, Toronto, 416-469-4250
Z. Rona, MD, Toronto 416-534-8880
J. Seale, MD, Ottawa 613-830-1298
K. Wolch. DMD, Toronto 416-281-4746

ND - Naturopath
DDS - Dentist

ENVIRONMENTAL DENTAL ASSOCIATION

1-800-388-8128. Referrals, resources and information on nontoxic dentists.

ECOLOGICAL (ORGANIC) GARDENING INFORMATION: 1-800-268-2000.

JOB ACCOMODATION NETWORK

Information on how to go about getting your employer or landlord to accomodate your special needs. Call 1-800-526-6262.

BUILDERS & RENOVATORS

Green City Design, Toronto, 416-691-2477
Greg Allen & Associates, Toronto, 416-962-6193
Lowans & Stephen, Toronto, 416-512-2628
Rulestone Renovations, Toronto, 416-694-6016

CONSULTANTS

M. Burstyn, Patient information and chronic illness. 416-832-0789.
B. Small, expertise in building products that contain minimal levels of chemical irritants. 416-649-1356.
Household Environmental Audits. 416-487-2061.

CALENDAR OF EVENTS

SUPPORT GROUP

A Toronto support group has been formed for AEHA members. The next meeting will be held on September 18 at 10:00 AM, at 85 Walmsley Blvd., Toronto, (416) 487-2061.

THE TRADING POST

The purpose of Trading Post is to list products that you want to buy or sell. The products should be suitable for the environmentally sensitive. Please note that this Trading Post section will not list products from manufacturing or distribution companies. If you have anything you want to buy or sell, write, Betty Auslander, 85 Walmsley Blvd., Toronto, Ontario, M4V 1X7.

TYPIST WANTED

The AEHA Quarterly is looking for a volunteer typist in the Toronto area. The work would involve straightforward typing on an IBM or IBM compatible computer. If interested, please contact Marianne Bertrand at 694-6020 or Betty Auslander at 487-2061.

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CLEAN HOUSE FOR SALE

Mr. and Mrs. Charles Watson
S.S. 2, Site 9, Comp. 51
Penetangui shene Ontario, L0K 1P0
705-549-2630

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FREE SAMPLE

A U.S. publication called Environ is offering to send a complimentary copy of their 40 page quarterly to our members. I find their quarterly to be interesting, thorough and very current. They routinely cover topics like EMFs, healthy building, and outdoor pollution. If you are interested, write to Environ, P.O. Box 2204, FortCollins, Co., 80522.

MEMBERSHIP APPLICATION

Membership including a subscription to the Quarterly is $25.00 per year.

Name: ______________________________

Address: ____________________________

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Postal code: _________________________

Phone: Home: ________________________

Work: ________________________

Fax: _________________________

Date: ____________ New: ___ Renewal: ___

Which branch, if any, you would like to belong to: ______________________________

Annual membership	$25.00
Donation	______
Total	______

Make cheque or money order payable to: Allergy and Environmental Health Association, P.O. Box 40604 Burlington, Ontario, L7P 4W1.

Comments ____________________________

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AEHA BRANCHES

NATIONAL

AEHA CANADA

P.O. Box 40604
Burlington, Ontario, Canada
L7P 4W1
1-800-695-9271

BRANCHES

BRITISH COLUMBIA

c/o Jean Stevens
P.O. Box 1231
Logan Lake, B.C.
V0K 1W0

HAMILTON-BURLINGTON

Pres: Linda DeMarchi
3162 Bentworth Drive
Burlington, Ontario
L7N 1M2
PH: 416-637-5146

KITCHENER

Pres: Alice Croft
85 Longwood Drive
Waterloo, Ontario
N2L 4B6
PH: 519-884-1008

LONDON

Linda Whitlock
1509 Rushland Avenue
London, Ontario
N2L 1X6
PH: 519-453-5920

NEW BRUNSWICK

Pres: Margaret Kelly
P.O. Box 4073
Dieppe, N.B.
E1A 6E7
PH: 506-382-3896

NOVA SCOTIA

Pres: Greg Booth
P.O. Box 31323
Halifax, N.S.
B3K 5Y5

OTTAWA

Pres: Chris Brown
P.O. Box 33023
Nepean, Ontario
K2C 3Y9

PRINCE EDWARD ISLAND

3 Charlotte Drive
Charlottetown, P.E.I.
C1A 2N4

WATERLOO-WELLINGTON

Pres: Colleen Crowe
11 Drew Avenue
Cambridge, Ontario
N1S 3R2

RESOURCE MATERIALS

Joanna Anderson
356 Rankin Drive
Burlington, Ontario
L7N 2B4
PH: 416-637-5146